

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

Liang, Xuecheng

Appl. No.

10/074,068

Filed

February 12, 2002

Title

A WEAR RESISTANT ALLOY CONTAINING

**RESIDUAL** 

AUSTENITE FOR VALVE SEAT INSERT

Grp./A.U.

1742

Examiner

Deborah Yee

Docket No.

1655-P3002-001

Name

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

July 20, 2004

William J. Schramm

Date

Signature

#### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicant hereby submits information which he believes may be material to the examination of this application and in respect to which there may be a duty to disclose in accordance with 37 C.F.R. § 1.56.

While this Information Disclosure Statement may be "material" pursuant to the above, it is not intended to constitute an admission that any disclosure or information referred to herein is "prior art" for this invention unless specifically designated as such.

#### **DETAIL DISCLOSURE**

The search report from the French Patent Office included a search that was performed in the European Patent Office. All of the Japanese documents have

180.00 DP

Appl. No. 10/074,068

-2-

English abstracts only except where an English equivalent has been included

such as European Patent Application 0430241 and 0665068. It is to be noted

that the U.S. equivalent to European Patent Application 0559899 namely U.S.

5,316,596 was cited by the U.S. Patent Examiner.

While the Search Report is dated June 2, 2004 it was not received and

reviewed by the undersigned, the principal attorney responsible for prosecuting

this application, until July 19<sup>th</sup>. The Search Report was forwarded from our

associate handling the French Patent Application and it was received in the

Undersigned's office on July 13, 2004.

The fee for the disclosure statement is enclosed. The Commissioner is

hereby authorized to charge any additional fees associated with this filing to

Deposit Account No. 50-0852.

Respectfully submitted,

REISING, ETHINGTON, BARNES,

KISSELLE, P.C.

Registration No. 24,795

P.O. Box 4390

Troy, Michigan 48099

(248) 689-3500

Date: July 20, 2004

JUL 2 2 2004

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE respond to a collection of information unless it contains a valid OMB control number. Under the Paperwork Re

Substitute for form 1449/PTO

Sheet 1

#### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known **Application Number** 10/074,068 Filing Date 2/12/02 First Named Inventor Xuecheng Liang Art Unit 1742 **Examiner Name** Deborah Yee 1655.3002.001 Attorney Docket Number

U. S. PATENT DOCUMENTS  Examiner Cite Document Number Publication Date Name of Patentee or Pages, Columns, L						
Examiner Initials*	Cite No.1	<del></del>	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
		Number-Kind Code <sup>2 (# known)</sup>			Figures Appear	
		US-			•	
		US-				
		US-				
		US-				
		US-				
		US-			•	
		US-		,		
		US-				
		US-				
		US-		· · · · · · · · · · · · · · · · · · ·		
		US-				
		US-				
		US-	1.	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
		US-				
		US-				
		US-				
		US-	<del>                                     </del>			
		US-		· · · · · · · · · · · · · · · · · · ·		
		03-			1	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages			
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> ( <i>if known</i> )	MM-DD-YYYY		Or Relevant Figures Appear	T		
		Abstract JP06256889	09-13-1994	Kimura Hiroyuki	Abstract			
		JP 06256889	09-13-1994	Kimura Hiroyuki	Abstract	Г		
		Abstract JP10068041	03-10-1998	Tsujimoto Yutak	Abstract	L		
		JP 1068041	03-10-1998	Tsukimoto Yutak	Abstract			
		EP 0 430 241 A1	06-05-1991	Hitachi Metals	Abstract			
		EP 0 665 068 A1	08-02-1995	Hitachi Metals	Abstract			

			 		3	
Examiner Signature	· · · · · <del>-</del> · <sub>·</sub>	<u> </u>		Date Considered		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Senter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND** TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

he Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/074,068			
Filing Date	2/12/02			
First Named Inventor	Xuecheng Liang	·		
Art Unit	1742			
Examiner Name	Deborah Yee			
Attorney Docket Number	1655 3002 001			

U. S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan	
		Number-Kind Code <sup>2 (If known)</sup>			Figures Appear	
		US-			. ,	
		US-				
<del></del>	,	US-				
		US-				
		US-	<del>                                     </del>	· · · · · · · · · · · · · · · · · · ·		
		US-	<del>                                     </del>			
		US-				
		US-	<u> </u>			
		US-				
		US	1			
		US-				
		US-	1	· · · · · · · · · · · · · · · · · · ·		
		US-	+			
		US-	1			
<del></del>		US-	1 :			
		US-	<del>-</del>	· · · · · · · · · · · · · · · · · · ·		
		US-	<del>                                     </del>		·	
		US-		<u> </u>		
		US-	+	· · · · · · · · · · · · · · · · · · ·		

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages			
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	Τ°		
•		EP 0 559 899 A1	09-15-1993	Kawasaki Steel	Abstract			
		Abst. JP2001040458	02-13-2001	Nippon Funmatsu	Abstract			
		JP 2001040458	02-13-2001	Nippon Funmatsu	Abstract			
,		Abst. JP2000280009	10-10-2000	Kogi Corp.	Abstract			
		JP 2000280009	10-10-2000	Kogi Corp.	Abstract			
		Abst. JP 08209299	08-13-1996	Nippon Steel	Abstract			

Examiner		Date
Signature		Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Transation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 3

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/074,068			
Filing Date	2/12/02			
First Named Inventor	Xuecheng Liang			
Art Unit	1742			
Examiner Name	Deborah Yee			
Attorney Docket Number	1655.3002.001			

U. S. PATENT DOCUMENTS  Examiner   Cite   Document Number   Publication Date   Name of Patentee or   Pages, Columns, Lines,						
Examiner Initials*	Cite No.1		MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan	
		Number-Kind Code <sup>2 (# known)</sup>			Figures Appear	
		US-	·	<u> </u>		
		US-				
		US-				
		US-				
		ŲS-				
-		US-				
		US-				
		US-				
		US-		•		
		US-				
•••		US-	· .	<del></del>		
		US-				
		US-			-	
		US-		· · · · · · · · · · · · · · · · · · ·		
		US-		· · · · · ·		
		US-	<del>                                      </del>			
		US-				
		US-				
		US-	·			

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document .	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages				
		Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> ( <i>if known</i> )	MM-DD-YYYY		Or Relevant Figures Appear	T⁴			
		JP 08209299	08-13-1996	Nippon Steel	Abstract				
		Abst. JP11061320	03-05-1999	Kougi KK	Abstract				
		JP11061320	. 03-05-1999	Kougi KK	Abstract				
	<u></u>	Abst. JP02030730	02-01-1990	Hitachi Metals	Abstract				
	ļ. , —	JP02030730	02-01-1990	Hitachi Metals	Abstract				
		Abst. JP03013542	01-22-1991	Kubota Corp.	Abstract				

Examiner	Date			•	
Signature	Consid	ered			
_			*		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Senter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

JUL 2 2 2004 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction quired to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 4

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/074,068			
Filing Date	2/12/02			
First Named Inventor	Xuecheng Liang			
Art Unit	1742			
Examiner Name	Deborah Yee			
Attorney Docket Number	1655.3002.001			

U. S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant			
		Number-Kind Code <sup>2 (# known)</sup>			Figures Appear			
		US-						
		US-						
<del></del>	,	US-						
		US-						
		US-						
		US-						
		US-						
-		US-						
		US-						
		US-		· · · · · · · · · · · · · · · · · · ·				
		US-						
		US-						
		US-						
		US-						
		US-						
		US-						
		US-						
		US-	† · · · · · · · · · · · · · · · · · · ·					
		US-						

FOREIGN PATENT DOCUMENTS										
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>				
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY							
		JP03013542	01-22-1991	Kubota Corp.	Abstract					
		Abst. JP05179394	07-20-1993	Kubota Corp.	Abstract					
		JP05179394	07-20-1993	Kubota Corp.	Abstract	L				
		Abst. JP05179392	07-20-1993	Kubota Corp.	Abstract					
		JP05179392	07-20-1993	Kubota Corp.	Abstract					
				1		Г				

Examiner	Date	•
Signature	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Senter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the senal number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND** TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.